I claim:

1. Aluminum-free borosilicate glass with chemical resistance and having a composition, in percent by weight, based on oxide content, of:

SiO_2	60 - 78
B_2O_3	7 - 20
Li_2O	0 - 2
Na_2O	0 - 4
K_2O	3 - 12
MgO	0 - 2
CaO	0 - 2
with MgO + CaO	0 - 3
BaO	0 - 3
ZnO	0 - 2
ZrO_2	0.8 - 12
TiO_2	0 - 10
CeO_2	0 - 1
F^-	0 - 0.6

and optionally at least one refining agent in a standard amount for refining.

2. Aluminum-free borosilicate glass as defined in claim 1, characterized by a composition, in percent by weight, based on oxide content, of:

SiO_2	67 - 75
B_2O_3	9 - 18
Li_2O	0 - 1
Na_2O	0 - 3
K_2O	5 - 10
with $Li_2O + Na_2O + K_2O$	5.5 - 13.5
CaO	0 - 1
BaO	0 - 1
ZnO	0 - 1
TiO_2	0 - 1
ZrO_2	0.8 - 10.5
CeO_2	0 - 0.4
F^-	0 - 0.6

and optionally at least one refining agent in a standard amount for refining.

3. Aluminum-free borosilicate glass as defined in claim 1, characterized by a composition, in percent by weight, based on oxide content, of:

SiO_2	68 - 74
B_2O_3	9 - 13
Li_2O	0 - 1

Na_2O	0 - 3
K_2O	5 - 10
with $Li_2O + Na_2O + K_2O$	5.5 - 13.5
ZrO_2	3 - 7
CeO_2	0 - 0.4
F^-	0 - 0.6

and optionally at least one refining agent in a standard amount for refining.

4. Aluminum-free borosilicate glass as defined in claim 1, characterized by a composition, in percent by weight, based on oxide content, of:

SiO_2	71 - 74
B_2O_3	9 - 12
Li_2O	0 - 1
Na_2O	0 - 3
K_2O	7 - 10
with $Li_2O + Na_2O + K_2O$	7 - 13.5
ZrO_2	4 - 7,

and optionally at least one refining agent in a standard amount for refining.

5. Aluminum-free borosilicate glass as defined in claim 1, characterized by a composition, in percent by weight, based on oxide content, of:

SiO_2	68 - 71
B_2O_3	8 - 11

Li_2O	0 - 1
Na_2O	0 - 3
K_2O	8 -11
with $Li_2O + Na_2O + K_2O$	8 - 13.5
ZrO_2	7.5 - 10.5

and optionally at least one refining agent in a standard amount for refining.

6. Aluminum-free borosilicate glass as defined in claim 1, characterized by a composition, in percent by weight, based on oxide content, of:

SiO_2	70 - 75
B_2O_3	15 - 18
Li_2O	0 - 1
Na_2O	0 - 3
K_2O	5 - 8
with $Li_2O + Na_2O + K_2O$	5.5 - 10.5
CaO	0 - 1
BaO	0 - 1
TiO_2	0 - 1
ZrO_2	0.8 - 5

and optionally at least one refining agent in a standard amount for refining.

7. Aluminum-free borosilicate glass as defined in claim 1, characterized by a composition, in percent by weight, based on oxide content, of:

SiO_2	67 - 70
B_2O_3	15 - 18
Li_2O	0 - 1
Na_2O	0 - 3
K_2O	7 - 10
with $Li_2O + Na_2O + K_2O$	7 - 12.5
ZnO	0 - 1
ZrO_2	2.5 - 6

and optionally at least one refining agent in a standard amount for refining.

8. Aluminum-free borosilicate glass as defined in claim 1, characterized by a composition, in percent by weight, based on oxide content, of:

SiO_2	74 - 78
B_2O_3	12 - 15
Li_2O	0 - 1
Na_2O	0 - 3
K_2O	3 - 8
with $Li_2O + Na_2O + K_2O$	3 - 11
ZnO	0 - 1
ZrO_2	2.5 - 7

and optionally at least one refining agent in a standard amount for refining.

9. Aluminum-free borosilicate glass as defined in claim 1, and containing at least 0.2 percent by weight of said Li_2O.

10. Aluminum-free borosilicate glass as defined in claim 1, and containing at least 0.3 percent by weight of said Na_2O.

11. Aluminum-free borosilicate glass as defined in claim 1, and containing at least 0.5 percent by weight of said Na_2O.

12. Aluminum-free borosilicate glass as defined in claim 1, and containing at least 0.2 percent by weight of said Li_2O and at least 0.3 percent by weight of said Na_2O.

13. Aluminum-free borosilicate glass as defined in claim 1, free of As_2O_3 and Sb_2O_3 apart from inevitable impurities thereof.

14. Aluminum-free borosilicate glass as defined in claim 1, having a coefficient of thermal expansion α (20°C; 300°C) of between 3.0×10^{-6} /K and 6×10^{-6} / K and a working point V_A of between 990°C and 1290°C.

15. A primary pharmaceutical packaging material consisting of the aluminum-free borosilicate glass as defined in claim 1.

16. A glass fiber comprising the aluminum-free borosilicate glass as defined in claim 1.

17. The glass fiber as defined in claim 16, and having a composition and properties for reinforcing concrete.

18. A sealing glass for tungsten, molybdenum or KOVAR® consisting of the aluminum-free borosilicate glass as defined in claim 1.

19. A fluorescent lamp made with the aluminum-free borosilicate glass as defined in claim 1.

20. The fluorescent lamp as defined in claim 19 and consisting of a miniaturized fluorescent lamps.

21. An apparatus glass consisting of the aluminum-free borosilicate glass as defined in claim 1.